

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of scanning comprising the steps of:
providing a scanning system (10) having a sample holder (14,220,54) and a relatively movable scanning device (18);
performing a scan of at least a part of an object (22,250,52) located on the sample holder;
establishing orientation of a plane of the sample holder (14,220,54); and
interpreting data from the scan using the orientation of the sample holder characterised in that, the orientation is established using data from the scan of the object.
2. (Original) A method according to claim 1 wherein, the orientation is established by defining a plane (56b) of the sample holder.
3. (Original) A method according to claim 2 wherein, the plane in which orientation is established is limited by boundaries (76a,76b).
4. (Currently Amended) A method according to ~~any preceding claim~~claim 1 wherein, the orientation is established by extracting at least three measurements.
5. (Currently Amended) A method according to ~~any of claims 1 to 3~~claim 1 wherein, the orientation is established by extracting data for at least 240° around the surface of the sample holder.

6. (Currently Amended) A method according to ~~any preceding claim~~claim 1 wherein, the orientation is established by measuring during a single process.

7. (Currently Amended) A method according to ~~any of claims 1 to 5~~claim 1 wherein, the orientation is established by measuring during more than one discrete processes.

8. (Currently Amended) A method according to ~~any preceding claim~~claim 1 wherein, the orientation is established within a defined vertical envelope with respect to the sample holder.

9. (Original) A method of scanning comprising the steps of:
providing a scanning system (10) having a sample holder (14,220,54) and a relatively movable scanning device (18);
scanning a datum;
scanning a sample; and
interpreting data from the sample scan using data from the datum scan;
characterised in that the scanning system automatically carries out the datum and sample scans.

10. (Original) A method of scanning comprising the steps of:
providing a scanning system (10) having a sample holder (14,220,54) and a relatively movable scanning device (18);
scanning a datum;
scanning a sample; and

interpreting data from the sample scan using data from the datum scan;
characterised in that both the datum and sample scans are carried out effectively as
one scan.